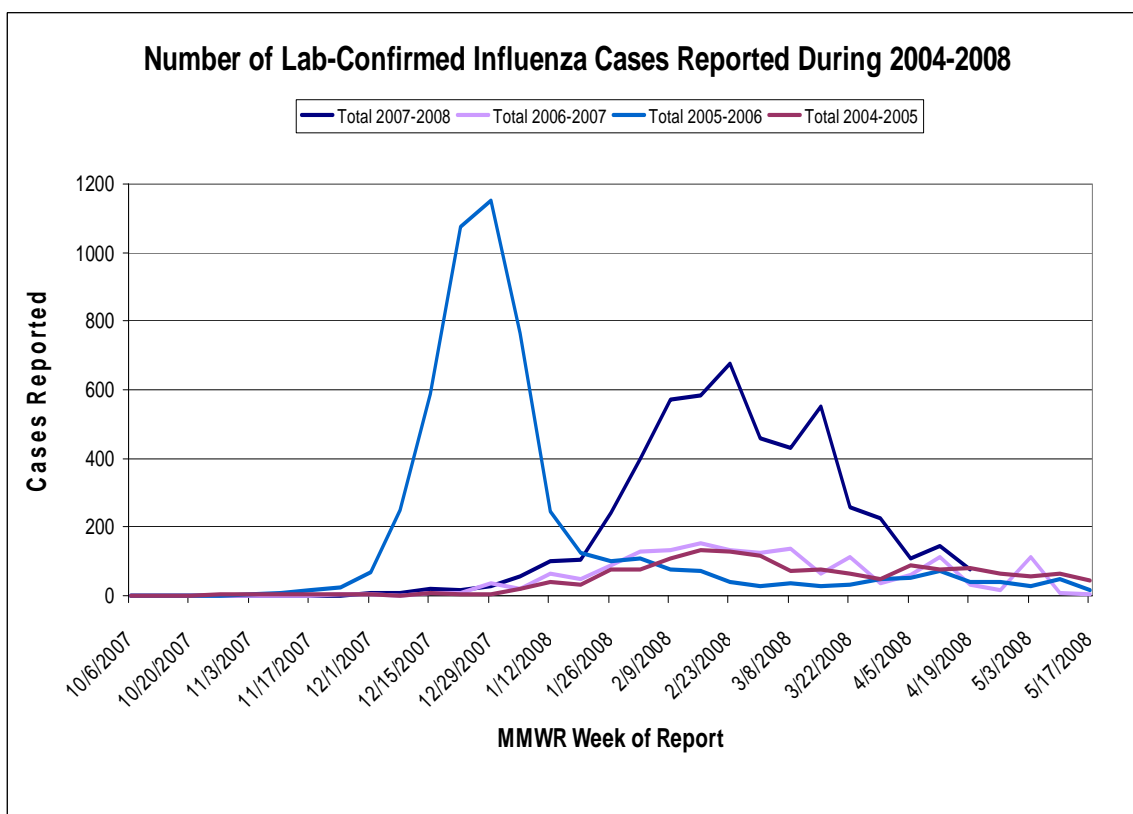


**Weekly Influenza Summary:**

Arizona's influenza activity remained at the "local" activity level for the week ending 4/19/08 (week 16). During the 2007-2008 influenza season, 5,068 lab-confirmed cases have been reported from all fifteen counties in Arizona and two pediatric influenza-associated deaths have been reported to ADHS. The influenza-like-illness rate is above the state baseline for week 15.

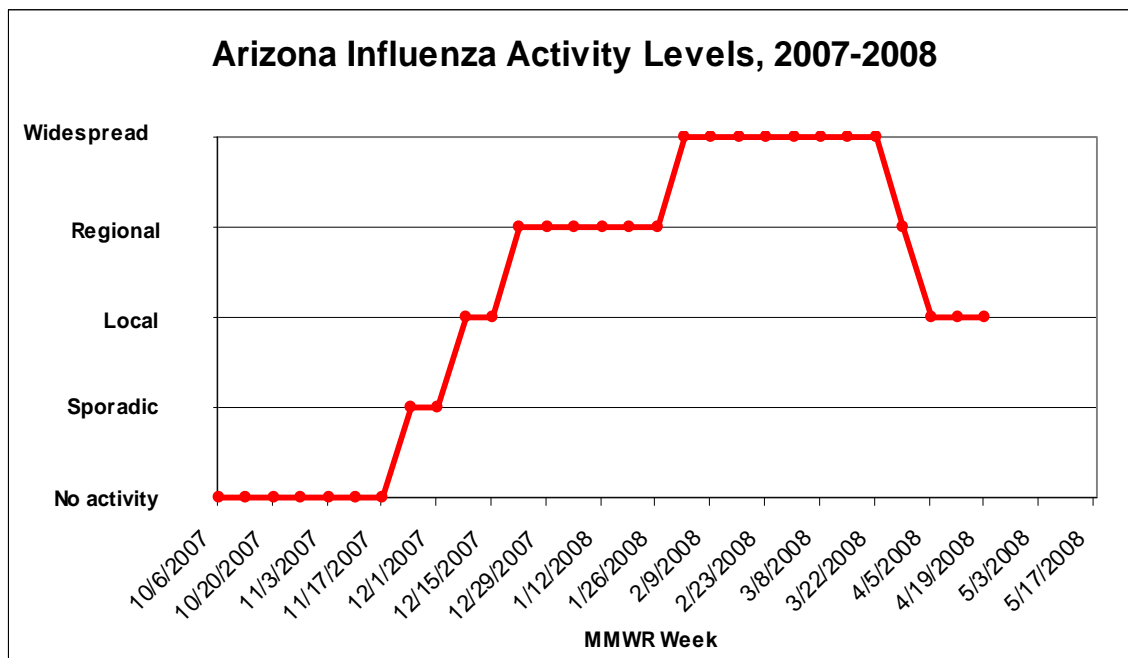
Data in this report are provisional and may change as more reports are received.

National influenza surveillance data are available at the CDC's Influenza Surveillance site (<http://www.cdc.gov/flu/weekly/fluactivity.htm>).



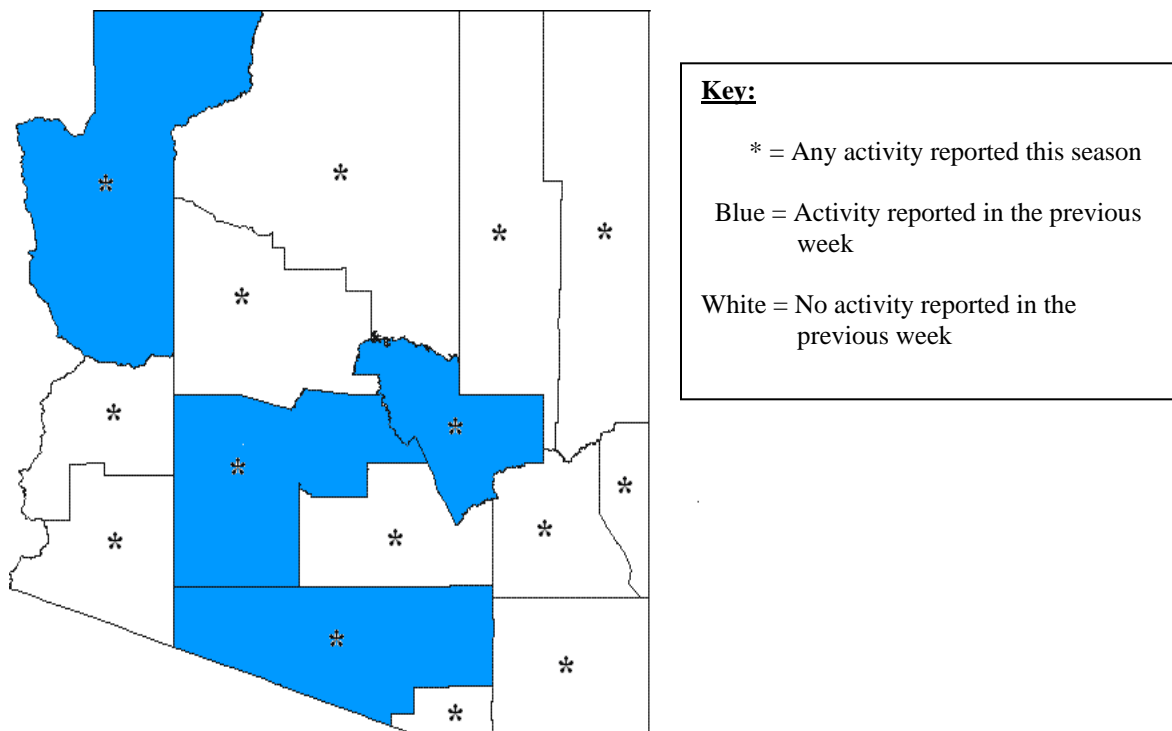
**Arizona Influenza Activity Levels:**

The graph below shows the influenza activity levels reported to the CDC for this season only. CDC has changed the reporting criteria for state activity levels so Arizona's data from previous seasons are no longer directly comparable to the current season. For week 16, Arizona reported "local" activity. Definitions of these reporting categories can be found at <http://www.cdc.gov/flu/weekly/fluactivity.htm>.



#### Laboratory-Confirmed Influenza Activity by County:

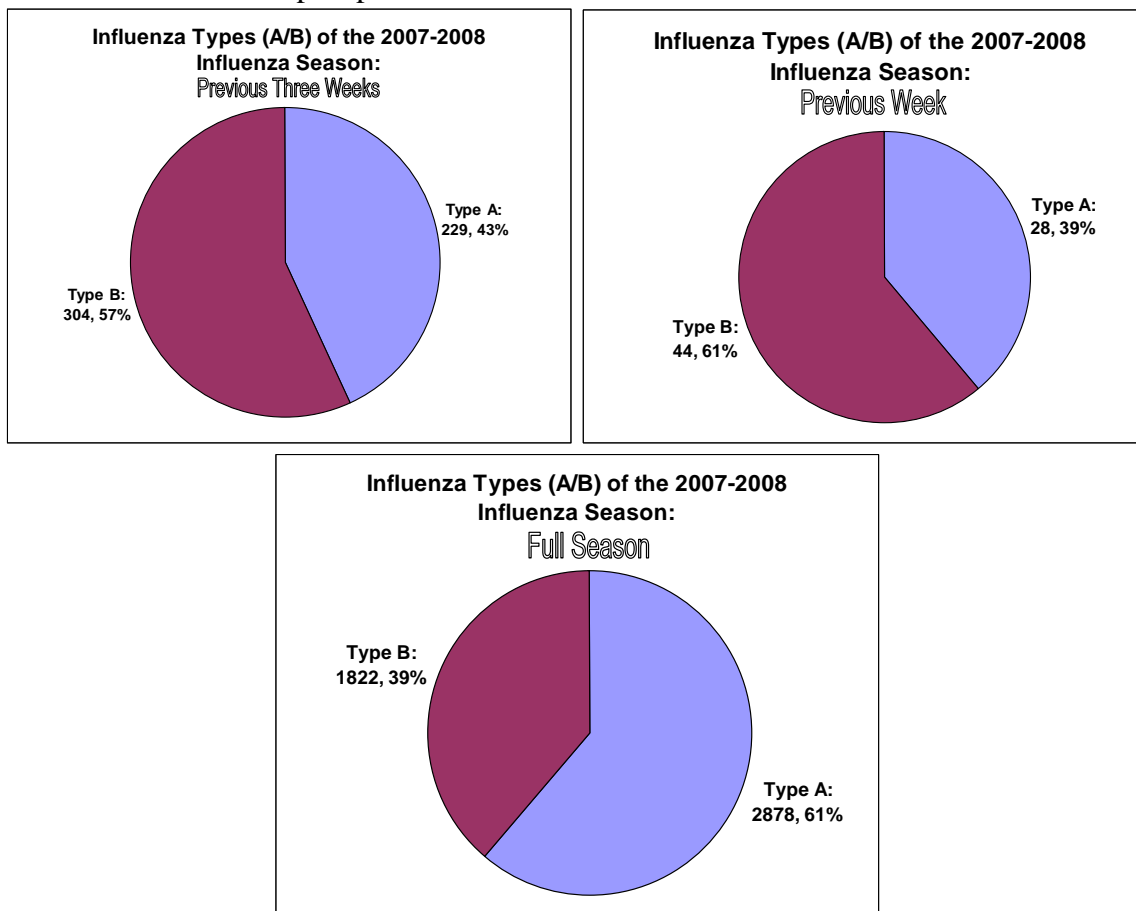
Arizona laboratories report positive influenza tests to ADHS. The positive cases are counted by the county of residence.



County	Number of Laboratory-Confirmed Cases		
	2007-2008 Season	Last Week	Last 3 Weeks
Apache	57	0	2
Cochise	91	0	3
Coconino	486	0	5
Gila	28	2	6
Graham	376	0	0
Greenlee	3	0	0
La Paz	7	0	4
Maricopa	2818	70	282
Mohave	121	1	4
Navajo	165	0	3
Pima	787	3	9
Pinal	60	0	7
Santa Cruz	24	0	0
Yavapai	41	0	0
Yuma	4	0	2
Unknown	0	0	0
<b>Total</b>	5068	76	327

### Laboratory Surveillance:

Arizona laboratories report positive influenza tests to ADHS.

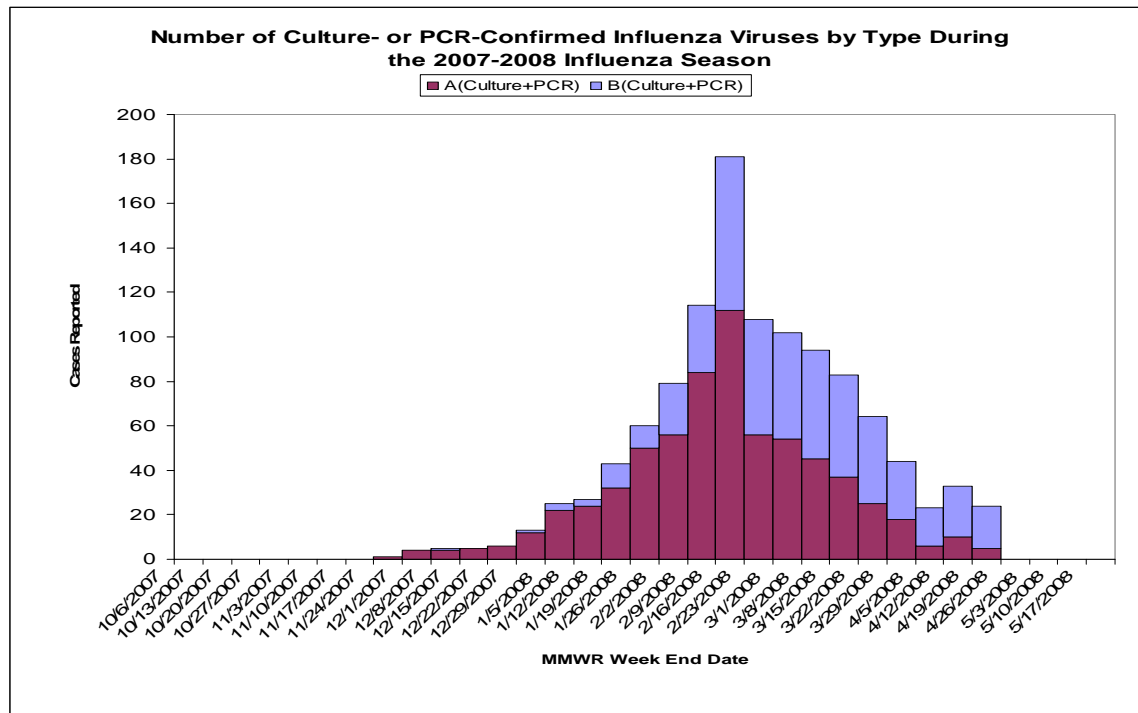


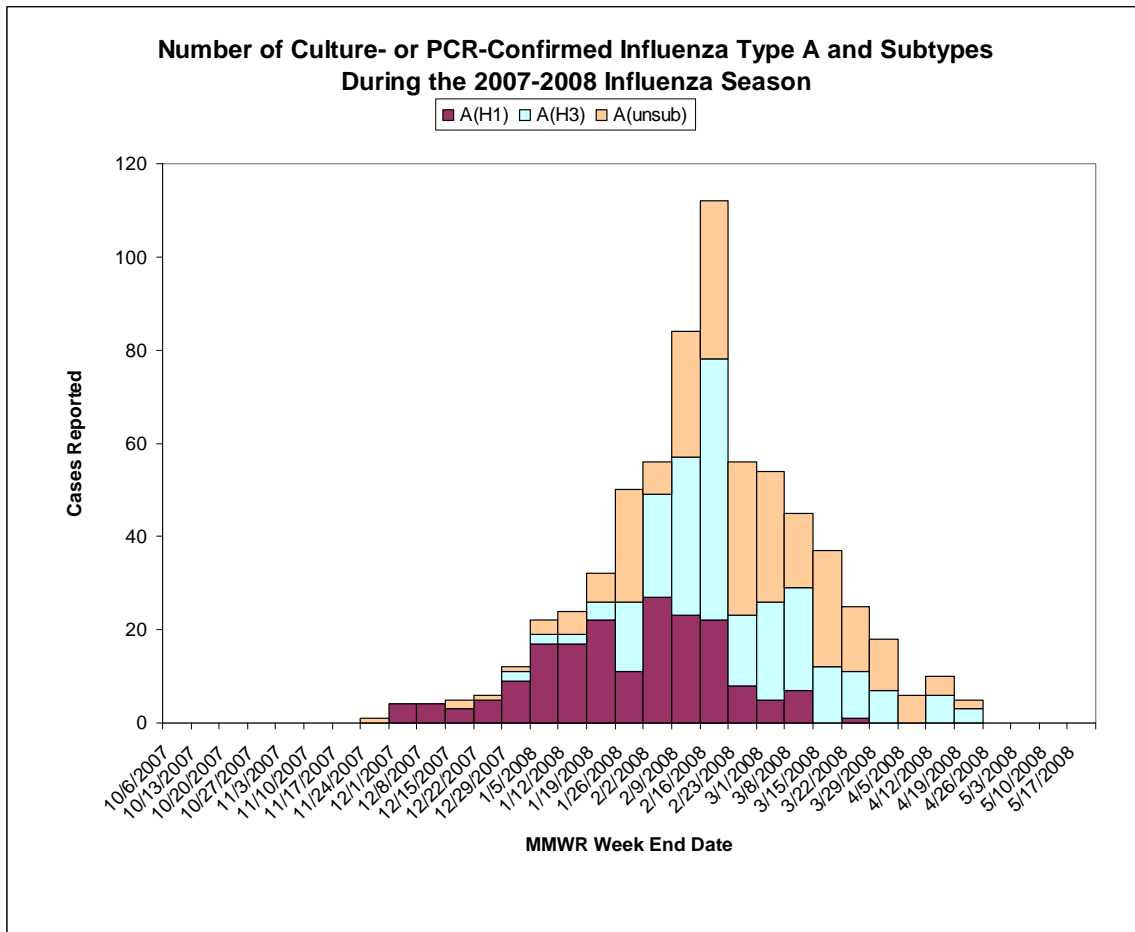
### Subtyping – Culture or PCR Results:

Viral isolation (culture) and polymerase chain reaction (PCR) may provide further information about the circulation of influenza viruses. For influenza A, the subtype (e.g. H1 or H3) can be determined by a test called hemagglutination inhibition (HI) using viral isolates. Polymerase chain reaction (PCR) can also be used to identify influenza B and the hemagglutinin (H) component of influenza A.

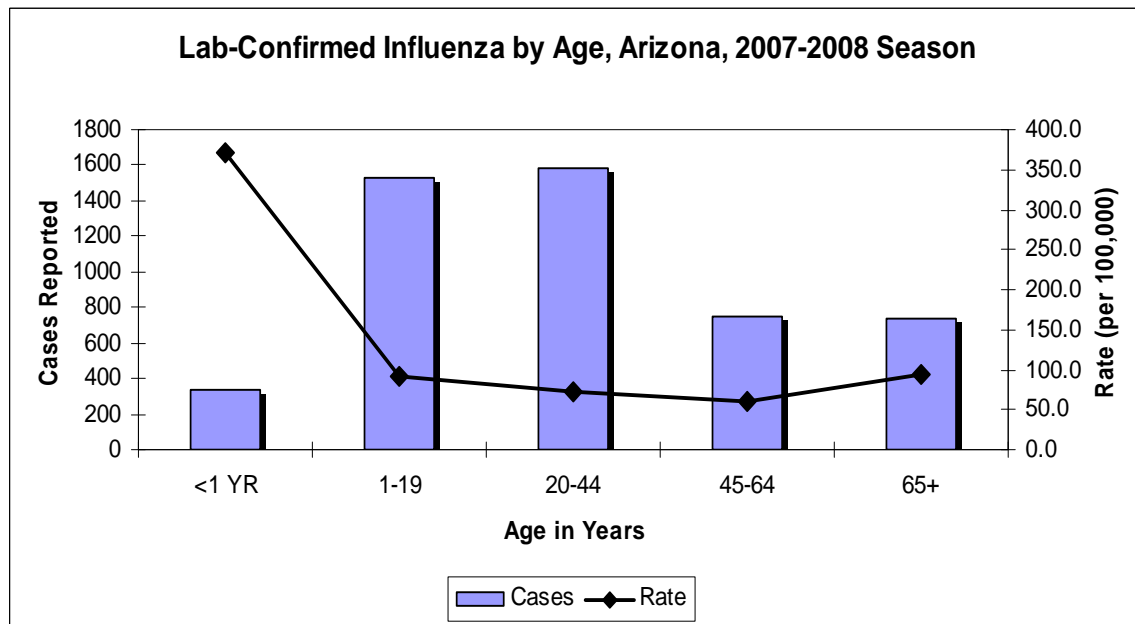
	2007-2008 Influenza Season			
	Season Types	Culture or PCR Results: Season	Last Week Types	Culture or PCR Results: Last Week
<b>Total</b>	5068	1138	76	24
<b>Influenza A</b>	2878	668	28	5
A/H1	0	89	0	0
A/H1N1	0	96	0	0
A/H3	0	220	0	3
A/H3N2	0	13	0	0
A/Unsub	0	250	0	2
<b>Influenza B</b>	1822	470	44	19
B/Malaysia	0	0	0	0
B/Shanghai	0	152	0	1
B/Unsub	0	318	0	18
<b>Unknown</b>	368	0	4	0

The following graphs explain further the culture- or PCR-confirmed influenza cases during the 2007-2008 influenza season.





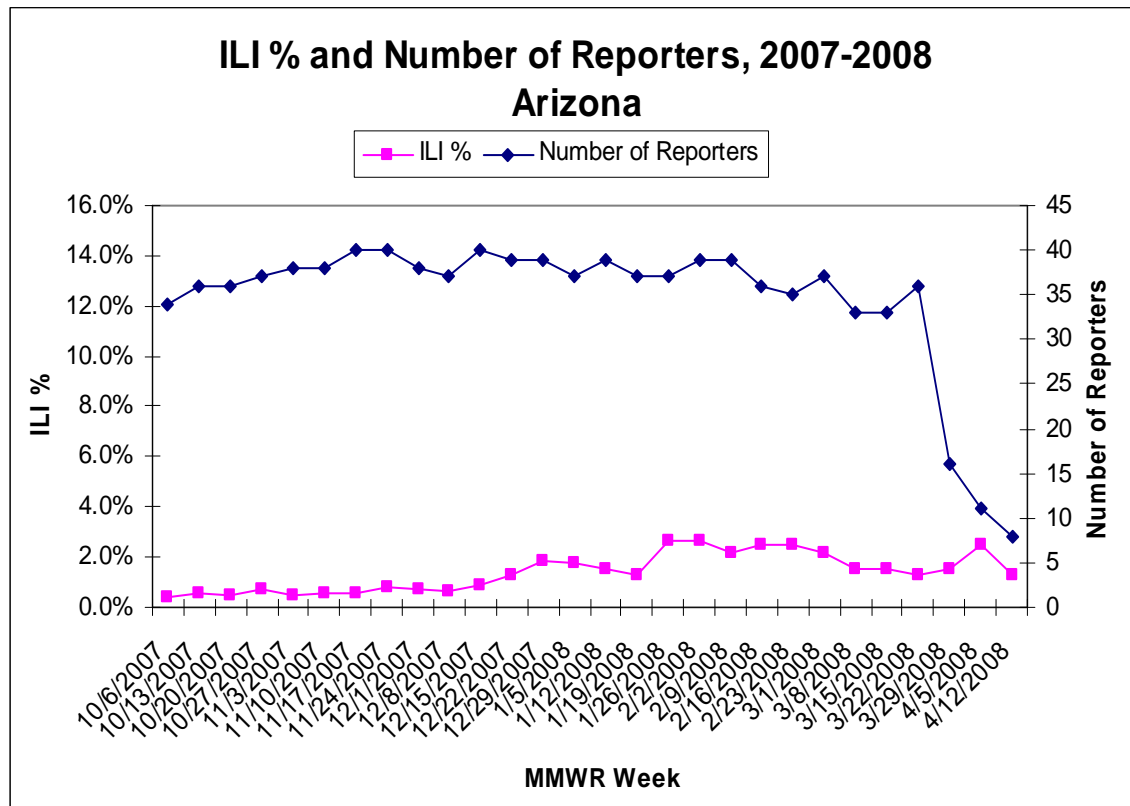
Age groups of reported cases range from less than one year to over 65 years.



### Influenza-Like Illness (ILI) Surveillance from Sentinel Providers

The proportion of patient visits to sentinel providers for ILI in the state was 1.3% for the week ending 4/12/2008 (week 15). This proportion is much higher than the Arizona ILI baseline (0.5%). As of 4/21/08, 8 sentinel providers reported by the end of week 15.

ILI is defined as a fever of at least 100°F plus either a cough or a sore throat.

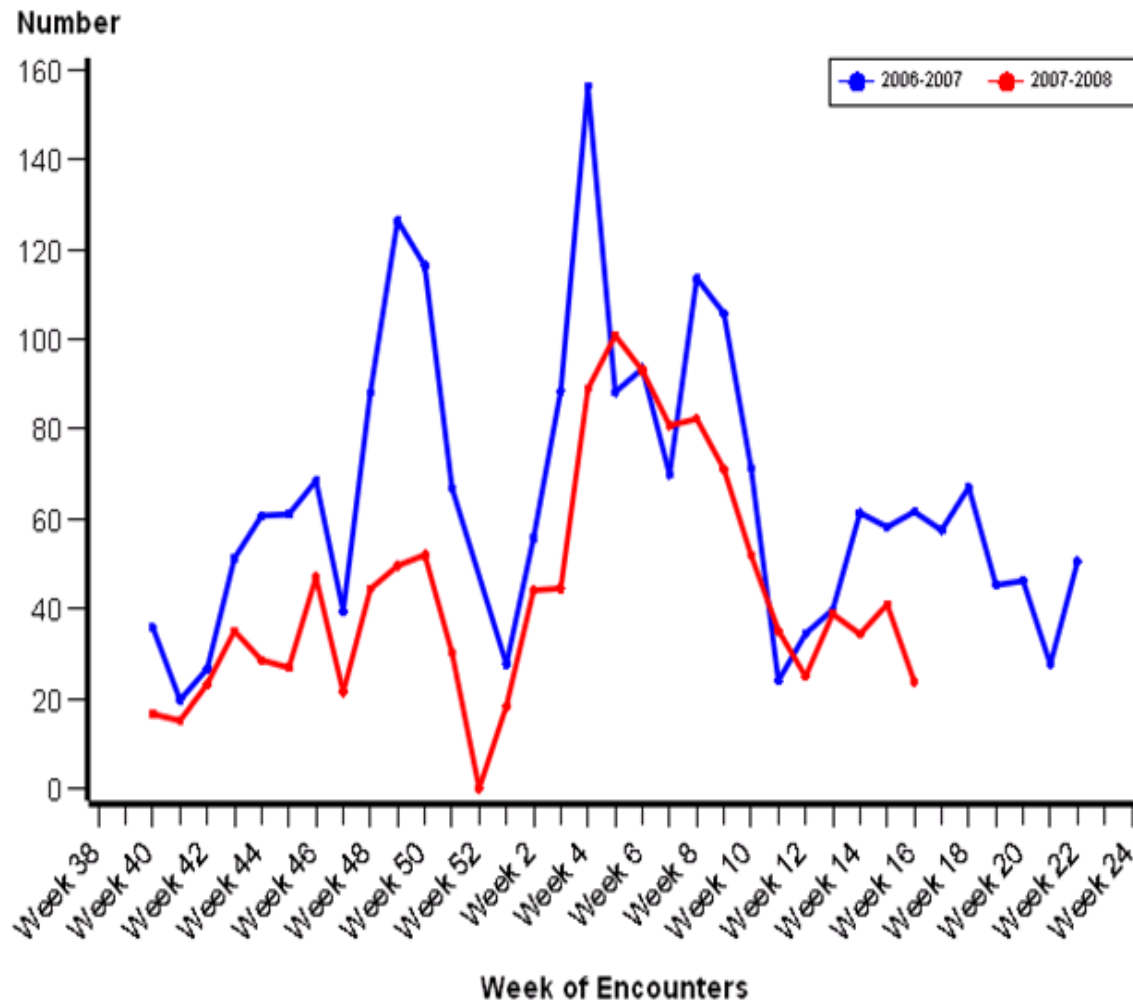


### Influenza-Like Illness (ILI) Surveillance from Participating Arizona Schools

ADHS and the Arizona School Nurse Consortium developed and implemented a software program called Child Health Indicator Program (CHIP) to assist school nurses in electronic management of student health records. Currently, nurses in 340 Arizona schools use the software to collect information on student health conditions for 266 nursing diagnosis codes, including influenza-like illness (ILI), rash, and gastrointestinal illness (GI).

The graph presents the weekly trend of ILI syndromes reported among students during the school years of 2006-2007 and 2007-2008. The number of school nurse encounters are not diagnosed cases of communicable diseases but are based on the nursing codes that school nurses enter to track student conditions. Also, the numbers in the graph are only from schools that used CHIP during the school year.

### Influenza-Like Illness Per School Enrollment in Arizona (per 100,000)

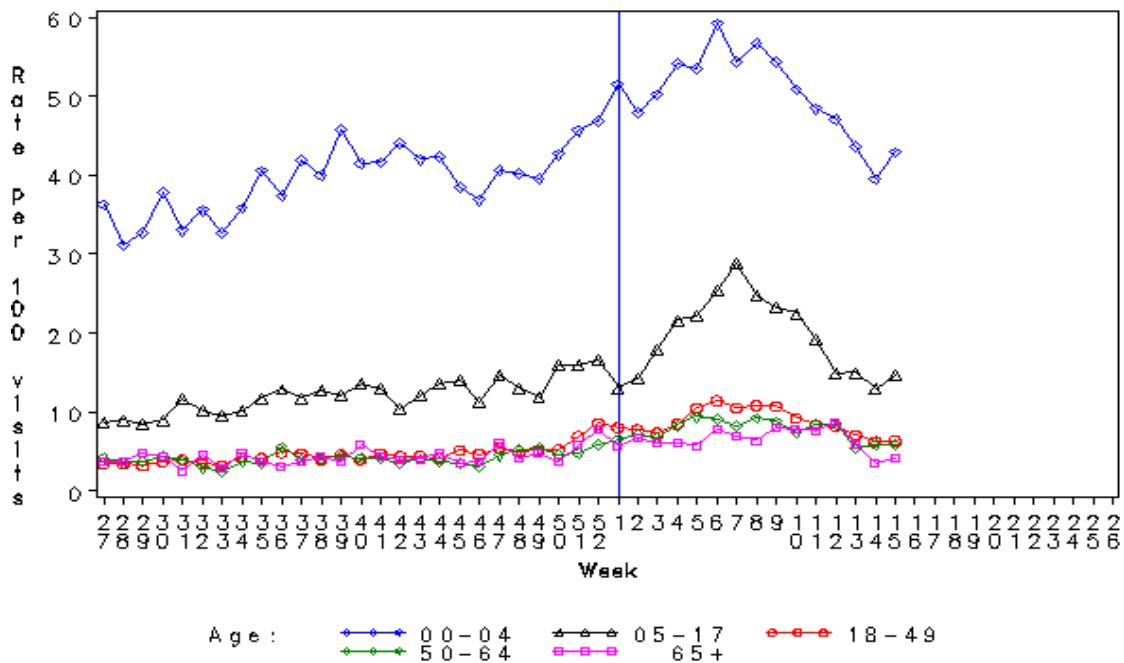


### Influenza-Like Illness (ILI) Surveillance from Biosense

BioSense is a national, real-time biosurveillance system that can be used for early event detection and health situational awareness. Currently, eight hospitals in Arizona submit data including patient chief complaint, physician diagnosis, supporting patient demographic data, daily hospital census to BioSense on daily basis. More information on BioSense can be found at <http://www.cdc.gov/biosense/>.

The graphs are time series analysis results based on BioSense emergency department chief complaint data in Arizona. The lines in the graph are the rate of Flu-Fever-Cough cases per 100 visits by age group.

**BioSense Hospitals Emergency Department Chief Complaint Data, Flu-Fever-Cough**  
**Arizona**  
**Season 2007-2008**



**RSV Activity in Arizona:**

As of 4/21/2008, 2,301 lab-confirmed cases have been reported. There were 6 new cases of RSV were reported during week 16.

